



UNITED NATIONS ENVIRONMENT PROGRAMME

*Action Plan for the
Caribbean environment programme*

UNEP Regional Seas Reports and Studies No. 26

Note: This document reproduces the parts of the report of the Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme (UNEP/CEPAL/IG.27/3) convened by UNEP in Montego Bay, Jamaica, 6 - 8 April 1981, as the final stage of the preparatory work leading to the adoption of the Action Plan.

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PREFACE

Ten years ago the United Nations Conference on the Human Environment (Stockholm, 5-16 June 1972) adopted the Action Plan for the Human Environment, including the General Principles for Assessment and Control of Marine Pollution. In the light of the results of the Stockholm Conference, the United Nations General Assembly decided to establish the United Nations Environment Programme (UNEP) to "serve as a focal point for environmental action and co-ordination within the United Nations system" (General Assembly resolution (XXVII) of 15 December 1972). The organizations of the United Nations system were invited "to adopt the measures that may be required to undertake concerted and co-ordinated programmes with regard to international environmental problems", and the "intergovernmental and non-governmental organizations that have an interest in the field of the environment" were also invited "to lend their full support and collaboration to the United Nations with a view to achieving the largest possible degree of co-operation and co-ordination". Subsequently, the Governing Council of UNEP chose "Oceans" as one of the priority areas in which it would focus efforts to fulfil its catalytic and co-ordinating role.

The Regional Seas Programme was initiated by UNEP in 1974. Since then the Governing Council of UNEP has repeatedly endorsed a regional approach to the control of marine pollution and the management of marine and coastal resources and has requested the development of regional action plans.

The Regional Seas Programme at present includes ten regions^{1/} and has over 120 coastal States participating in it. It is conceived as an action-oriented programme having concern not only for the consequences but also for the causes of environmental degradation and encompassing a comprehensive approach to combating environmental problems through the management of marine and coastal areas. Each regional action plan is formulated according to the needs of the region as perceived by the Governments concerned. It is designed to link assessment of the quality of the marine environment and the causes of its deterioration with activities for the management and development of the marine and coastal environment. The action plans promote the parallel development of regional legal agreements and of action-oriented programme activities^{2/}.

On the initiative of several Caribbean States, the Governing Council of UNEP decided in 1974 that "UNEP should concentrate on the protection of the marine environment" and stressed "the importance of activities in the Caribbean" (Decision 8/11). In keeping with the regional approach, an early association was sought by

^{1/} Mediterranean, Kuwait Action Plan Region, West and Central Africa, Wider Caribbean, East Asian Seas, South-East Pacific, South-West Pacific, Red Sea and Gulf of Aden, East Africa and South-West Atlantic.

^{2/} UNEP: Achievements and planned development of UNEP's Regional Seas Programme and comparable programmes sponsored by other bodies. UNEP Regional Seas Reports and Studies No. 1. UNEP, 1982.

UNEP with the Economic Commission for Latin America (ECLA) and in 1977 a joint UNEP/ECLA project team was set up to co-ordinate the preparations for the development of an Action Plan for the Caribbean Environment Programme. An eight-member Advisory Panel, composed of eminent Caribbean experts, provided UNEP and ECLA with valuable policy guidance on the development of the Action Plan in the framework of the UNEP-sponsored Regional Seas Programme. The close collaboration of the specialized agencies of the United Nations and of other intergovernmental, international and regional organizations was also sought, and obtained, in the preparation of the Action Plan.

As part of the preparatory activities, a large number of surveys, reviews and studies were prepared under the guidance of UNEP and ECLA^{3/} and the first draft of the Action Plan was based on these documents.

The First Meeting of Government-nominated Experts (Caracas, Venezuela, 28 January - 1 February 1980) reviewed the first draft of the Action Plan and the documents supporting it. The meeting provided UNEP and ECLA with advice on the further preparatory activities which led to the Second Meeting of Government-nominated Experts (Managua, Nicaragua, 23 - 27 February 1981).

The expert meeting in Managua made a detailed study of the principal components of the Action Plan, reviewed the specific project proposals and recommended a priority programme, analysed the various options for institutional and financial arrangements needed to support the implementation of the Action Plan, and formulated general guidelines for the development of a regional legal agreement which could serve as the legal framework of the Caribbean Environment Programme. Furthermore, the Managua meeting recommended the convening of an intergovernmental meeting to review, revise and adopt the Action Plan for the Caribbean Environment Programme and to decide on all measures, including the institutional and financial arrangements, needed for its effective implementation.

The Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme was convened by UNEP in co-operation with ECLA in Montego Bay, Jamaica, 6 - 8 April 1981. The representatives of Governments from 22 States of the region adopted at the meeting the Action Plan for the Caribbean Environment Programme, a conference resolution dealing with (a) programme implementation, (b) institutional arrangements, and (c) financial arrangements related to the implementation of the Action Plan and the programme priorities for the Action Plan (UNEP/CEPAL/IG.27/3).

The Action Plan, the conference resolution and the programme priorities adopted at Montego Bay are reproduced in this document. The numbering of paragraphs in this document follows the numbering used in the report of the Montego Bay meeting.

^{3/} For a summary of these studies see UNEP/CEPAL: Development and environment in the Wider Caribbean Region: A synthesis. UNEP Regional Seas Reports and Studies No. 14. UNEP, 1982.

(111)

CONTENTS

	<u>Pages</u>
ACTION PLAN FOR THE CARIBBEAN ENVIRONMENT PROGRAMME (UNEP/CEPAL/IG.27/3, Annex IV)	1 - 12
PREAMBLE	1 - 2
I INTRODUCTION	2
II ENVIRONMENTAL ASSESSMENT AND MANAGEMENT	2 - 8
III EDUCATION, TRAINING AND DEVELOPMENT OF HUMAN RESOURCES	9
IV SUPPORTING MEASURES	9 - 12
RESOLUTION ON THE ACTION PLAN FOR THE CARIBBEAN ENVIRONMENT PROGRAMME (UNEP/CEPAL/IG.27/3, Annex V)	13 - 16
I PROGRAMME IMPLEMENTATION	13 - 14
II INSTITUTIONAL ARRANGEMENTS	14
III FINANCIAL ARRANGEMENTS	15 - 16
PROGRAMME PRIORITIES FOR THE ACTION PLAN (UNEP/CEPAL/IG.27/3, Appendix II)	17 - 19.

ACTION PLAN FOR THE CARIBBEAN ENVIRONMENT PROGRAMME

PREAMBLE

1. The region is a geographical entity made up of States and Territories with diverse economic and political structures, natural resources, social systems, environmental characteristics and potential development capabilities. These diversities have been recognized in the formulation of this Action Plan.

2. The region covered by the Action Plan is the Wider Caribbean, and it comprises the insular and coastal States and Territories of the Caribbean Sea and the Gulf of Mexico, including the Bahamas, Guyana, Suriname and the French Department of Guiana, as well as the waters of the Atlantic Ocean adjacent to these States and Territories. Other countries may participate in the Action Plan if they so desire, and, in accordance with United Nations procedures, they will be classified in terms of the nature of their participation.

3. The island countries of the region have special needs owing to the fragility of their ecosystems and their particularly limited carrying capacities. These were specifically recognized in the Action Plan.

4. The principal objectives of the Action Plan are to assist the Governments of the region in minimizing environmental problems in the Wider Caribbean through assessment of the state of the environment and development activities in environmental management. Furthermore, the Action Plan will establish a framework for activities requiring regional co-operation in order to strengthen the capacity of the States and Territories of the Wider Caribbean region for implementing sound environmental management practices and thus achieve the development of the region on a sustainable basis. In order to achieve these overall goals, co-operation will specifically include:

- assistance to all countries of the region, recognizing the special situation of the smaller island countries;
- use of the region's human, financial and natural resources through technical co-operation among developing countries (ICDC);
- regional self-reliance through the sharing of experience in common problems;
- co-operation on problems of a transnational or international nature, including natural and man-induced disasters;
- stimulation and co-ordination of international assistance activities;

- strengthening of existing national and subregional institutions;
- increasing public interest in, and awareness of the environment/development process.

I INTRODUCTION

5. In order to achieve the objectives of this Action Plan, the following processes must take place:

- (a) Assessment, including an inventory and analysis of natural resources and their environmental characteristics, as necessary for formulating an environmental diagnosis in order to provide a basis for sound environmental management;
- (b) Management, including the formulation of guidelines, plans and specific projects as well as the determination of the means necessary for this purpose.

6. The Action Plan will concentrate its activities on the coastal areas with special reference to the interactions among terrestrial, coastal and marine ecosystems.

7. The Action Plan recognizes two distinct action levels:

- (a) Development of long-term comprehensive strategies for environmentally sound development, taking into account the priorities, needs and capabilities of the region; and
- (b) Specific, action-oriented co-operative projects in response to the region's important and immediate environmental needs.

8. The components of the Action Plan are interdependent and constitute a framework for comprehensive action in order to contribute both to the protection and to the continued environmentally sound development of the region. No component is an end in itself.

II ENVIRONMENTAL ASSESSMENT AND MANAGEMENT

9. One of the major constraints on the effective use of resources in the development processes confronting the Wider Caribbean region is the paucity of environment and resource information which impedes rational decision-making. This lack of adequate information is particularly critical in that it relates to issues of a fundamental nature such as:

- (i) the potential of underutilized resources;
- (ii) the fragility of many of the region's ecosystems;
- (iii) the inability of overutilized and degraded resources to maintain sustained yields; and

- (iv) the presence of many island countries which are ecosystems with limited resources and relatively large populations.

10. Consequently, the environmental assessment component, which includes the systematic description and examination of environmental topics or problems evaluating their present and future implications for man and the environment, will underlie and facilitate decision-making and the implementation of the environmental management elements of the Action Plan.

11. Owing to the lack of basic environmental data and scientific knowledge, a co-ordinated resource inventory and environmental monitoring programme will be developed throughout the region covered by this project, particularly for coastal and marine areas and neighbouring areas affecting the latter (including estuaries, deltas, marshes, mangroves lakes, rivers, coastal lagoons, coral reefs and sea-grass beds), as a basis for providing guidelines for environmentally sound development and for training tasks. The operational details of these programmes will be based on existing and projected national, regional and international activities in this field.

12. The key to environmentally sound development is the management of the resources on a sustainable basis. Such environmental management should take into account the carrying capacity of the environment, the goals of development as defined by the pertinent national authorities, and the economic feasibility of implementing them.

13. Most of the region's environmental needs can best be satisfied, and will continue to be principally dealt with, by individual States and Territories. Regional and subregional co-operative action, however, can strengthen and supplement national efforts, particularly in attending to joint concerns which, by their nature, lie outside the control of any single country. In addition, co-operative regional and subregional action can be especially beneficial to the smaller States and Territories, which have limited capacity for dealing with environmental problems.

14. Possible types of regional and subregional action include international consultations, co-operative research and joint actions by national institutions.

General

15. Taking into account the priority opportunities for regional or subregional co-operation and action, based on the critical needs of the people of the region, the major activities of the environmental programme will include:

- (a) Survey of national capabilities and means to respond to environmental problems including scientific and administrative institutions, manpower, research facilities and equipment.
- (b) Analysis of development trends in the region, particularly in coastal areas, in order to determine possible areas of environmental stress resulting from multiple demands on limited resources.
- (c) Development and strengthening of the capability of the nations of the region to prepare environmental impact analyses of major development projects and plans in order to incorporate the dimension of the environment and natural resources in the planning and implementation of socio-economic development programmes.

- (d) Promotion of increased technical and financial support for sound environmental management practices within ongoing national, regional, and internationally-supported economic development activities, so that they will have a demonstration effect.
- (e) Development of regional and subregional networks of coastal, marine and terrestrial protected areas so as to help to maintain the living natural resources vital to development.
- (f) To further existing efforts and agreements involving countries of the region, development of co-operative activities for the protection of endangered and threatened species so as to help to maintain the region's wealth of genetic resources; and the harmonization of national policies for the management of wildlife, genetic resources, and natural habitats.

Pollution control

16. Assessment of the origin and magnitude of pollution in the region with special reference to hydrocarbons and other hazardous substances including:

- (a) determination of technical knowledge as well as existing means and economic capabilities at the national or regional level for preventing, combating, limiting and, in so far as possible, eliminating pollution and other adverse effects of the exploration, exploitation, refining and transportation of hydrocarbons and other hazardous substances;
- (b) studies on sources of pollution by hydrocarbons and other hazardous substances;
- (c) identification and monitoring of existing and potential direct and indirect effects of the exploration, exploitation, refining and transportation of hydrocarbons and other hazardous substances;
- (d) studies of the destination and effect of oil pollution, especially oil spills, on tropical coastal ecosystems, particularly those of economic importance, such as mangrove swamps, coral reefs, beaches and coastal fisheries, by making use and taking advantage of accidental spills;
- (e) identification and monitoring of potential and existing hazards of the transportation of hazardous substances other than oil and petroleum hydrocarbons.

17. Assessment of the sources, quantities and routes of industrial and agricultural wastes as well as domestic and municipal wastes reaching the marine environment and their effects on human health, marine ecosystems (in particular fishery resources) and coastal amenities.

18. The Management of Pollution Control will involve:

- (a) Development of regional and subregional co-operation in preventing, combating, detecting, containing and cleaning up accidental spills of hydrocarbons and other hazardous substances.
- (b) Promotion of development of national and subregional contingency plans to control pollution caused by hydrocarbons, bearing in mind the work undertaken by organizations already participating in this effort. Co-ordination of existing national, subregional and regional plans.

- (c) Development and strengthening of national capabilities for pollution control and monitoring through training and harmonization of methodologies.
- (d) Strengthening of national capabilities to develop or improve programmes for water quality control in coastal areas.

Coastal areas

19. Assessment of the impact of coastal and land-based activities on coastal marine resources comprising:

- (a) identification of critical coastal areas within the region;
- (b) studies of the characteristics of industrial, agricultural and domestic waste discharged into coastal areas (waste discharge profile);
- (c) studies of the effects of pollutants and coastal development activities on important biological communities and habitats, particularly those connected with coastal fisheries and other coast-dependent activities;
- (d) development of a basis for environmental quality criteria applicable to the tropical coastal waters of the region;
- (e) studies of land use, conservation and recovery of coastal swamps and coastal lagoons;
- (f) studies of the impact of building, engineering and mining activities on coastal areas;
- (g) studies of the effects of pesticides on banana plants and other major crops, and of possible biological controls.

20. Assessment of the coastal dynamics that have a significant impact on human health, marine ecosystems and human activities in modifying the fate of wastes, sediment and sand movement as well as the configuration of the coasts.

21. The Management of Coastal Areas will involve:

- (a) formulation of advisory coastal zone management schemes with particular reference to the preparation of guidelines for land use, resource management and environmental protection and support for national endeavours in this area;
- (b) catalysis of assistance to national institutions for the restoration of degraded coastal ecosystems, especially mangroves and coral reefs, as part of general coastal management plans.

Fisneries

22. Studies of the life-cycle of commercially important species of crustaceans, fishes and molluscs, with particular reference to the role played by coastal ecosystems such as mangroves, coastal lagoons, coral reefs and turtle grass beds.

23. Studies to establish the fishery potential of the region, its present utilization and the optimum yield that can be maintained.

24. Studies of the technologies applied at present to harvest coastal fisheries with a view to improving efficiency and productivity on a basis which can be maintained. Particular attention will be paid to artisan-type fishing industries.

25. Assessment of the suitability of species and techniques for aquaculture and mariculture.

26. The Management of Fisheries will involve:

(a) development and strengthening of co-operation, exchange of information and training activities fostering locally appropriate aquaculture technologies;

(b) harmonization of policies and practices to ensure rational utilization of large-scale commercial and artisanal-type fisheries on a sustainable basis.

Watersheds

27. Assessment of the effects of modifications on the relationship between forest cover and water and soil resource utilization with a view to introducing environmental planning concepts in the management of watersheds, particularly on small islands and coastal areas.

28. The management of watersheds will involve the development of watershed management guidelines especially for drainage areas surrounding the Caribbean Sea, with particular reference to:

- Control of floods, soil erosion and sedimentatons;
- Prevention of the destruction of tropical forests and establishment of reafforestation programmes as appropriate;
- Protection of the nydroelectric potential of the rivers;
- Maintenance and improvement of adequate freshwater management on the surface and underground;
- Maintenance of wildlife habitats;
- Prevention of the pollution of the catchment by domestic, agricultural and industrial wastes.

Natural disasters

29. Survey and evaluation of the disaster potential of natural phenomena (risk analysis) in order to develop an adequate short-term strategy and medium- and long-term planning for the prevention and mitigation of risks.

30. Continued co-operation with the pertinent agencies in the survey and evaluation of existing strategies and procedures of preparation for national disasters, and of the intrinsic effects of disasters, with a view to developing more appropriate national, subregional and regional response mechanisms in a form compatible with environmental protection.

31. Management will involve strengthening of existing regional or subregional co-operation for natural disaster prevention and relief, and for environmental recovery following disasters.

Energy

32. Assessment of major sources of non-conventional energy and their potential for utilization.

33. Management will involve:

- (a) co-operation and technical assistance in the application of energy-accounting systems which may be used as the basis for the formulation and implementation of sound national energy policies and programmes;
- (b) reinforcement of regional and subregional, integrated, non-conventional energy activities, with the objective of a fuller exchange and dissemination of all available information and provision of training opportunities;
- (c) development of a co-operative programme for the implementation of appropriate technologies and practices for waste disposal, with special attention to recycling, energy generation and the special problems of the smaller islands.

Human settlements

34. Assessment and evaluation of present characteristics and future population trends, considering elements of growth, distribution, density and migration of environmental significance, with particular attention to the special problems of islands and the environmental impact of relocation and temporary housing.

35. Assessment of existing coastal urbanization policies and processes and human settlements technologies applied in the region, including building technologies appropriate to the region's environment.

36. Identification of the interaction between the principal ecosystems of the region in order to determine potential long-range effects caused by human activities and the environmental and infrastructural cost of population growth.

37. Management will involve:

- (a) encouragement of the consideration of ecological variables and ecodevelopment techniques in the design of new human settlement projects;
- (b) encouragement of the formulation of human settlement projects leading to alternative styles of development;

- (c) promotion of policies and practices in the field of human settlements which will give special attention to the ecological aspects of urban and rural development as well as to the need for proper structural designs, taking account of the possibility of natural disasters. Attention will be given to the development of appropriate building technologies and the appropriate use of indigenous building materials on a sustainable basis.

Tourism

38. Assessment of the impact of tourism on the physical, social and cultural environment, particularly as regards coastal zones.

39. Assessment of alternative tourism (integrated tourism) aimed at reducing the negative impact on local environments, bringing greater benefits to local people, and putting tourism on a sustainable basis.

40. A survey of potential areas for national parks and marine reserves that could serve as tourism resources, and at the same time protect fragile ecosystems and areas of scientific interest.

41. Management of tourism will involve the development of guidelines to minimize the negative impact of tourism on the physical, social and cultural environment, particularly as regards coastal zones.

Environmental health

42. Survey of existing environmental health problems with particular reference to:

- availability and quality of drinking water supplies particularly in rural areas;
- waste water disposal;
- solid waste management;
- working environment hazards;
- impact on human health of industrial waste and pesticide residues including the contamination of ground water;
- food contamination and its possible impact on the problems of human health and malnutrition;
- the health problem associated with migration to urban areas and the relocation of people as a result of development projects;
- vector control and vector-borne disease.

43. Management of environmental health will involve the development and strengthening of national institutional capability for improving environmental health services including water supplies in urban and rural areas, water quality control, water resources, sanitary waste disposal, water pollution control and vector control.

III EDUCATION, TRAINING AND DEVELOPMENT OF HUMAN RESOURCES

44. In view of the vital need for supporting measures to reinforce sound environmental management, the countries of the region give the highest priority to strengthening their institutional and human resources in the various fields of environmental and natural resource management.
45. The Plan envisages an intensive training and technical assistance effort, especially in the early stages of the Plan's implementation, to allow less-developed participant countries to take full advantage of possibilities for co-operation.
46. Many of the Plan's environmental management activities will in fact have built-in training components with stress on their action orientation and the indispensable link between management and training in the region.
47. In addition to well-qualified and prepared manpower, adequate care of the environment requires the active help of the entire population.
48. The Plan gives high priority to:
- (a) development of a regional manpower base;
 - (b) environmental education activities at all levels related to local socio-economic and ecological characteristics;
 - (c) support for strengthening of environmental non-governmental organizations;
 - (d) promotion of media seminars and campaigns to focus and strengthen public awareness of environmental issues.

IV SUPPORTING MEASURES

49. A large number of supporting measures, including the development of appropriate institutional and financial arrangements, is required to ensure the harmonious development of the Action Plan.
50. The assistance of the international organizations, in particular those belonging to the United Nations system, is essential for the implementation of the Action Plan; their full support for specific projects will therefore be solicited.

Institutional arrangements

51. The results of the Action Plan will depend on action at national, regional and subregional levels. It is therefore important to identify and develop appropriate institutional capabilities and co-ordinating mechanisms at each of these levels. The following components are essential for this task.

(A) Overall authority

52. The overall authority to determine the content of the Action Plan, review its progress and direct its course, including the financial implications is to be found in the ministerial/plenipotentiary level meetings of Governments participating in the Action Plan.

(B) Monitoring Committee

53. In order to ensure, during the time between intergovernmental meetings, that continuous contacts of a technical nature are maintained among experts nominated by Governments in the region, participating in the implementation of the Action Plan, it is proposed that a Monitoring Committee should be set up to monitor the progress of priority projects and ensure their implementation.

(C) Overall co-ordination

54. The Governments of the States and Territories participating in the Action Plan should assign responsibility for the overall co-ordination of the implementation of the Action Plan to UNEP which would then answer to the Governments.

(D) Regional co-ordinating unit (RCU)

55. Strong regional co-ordination will be established to ensure the timely and harmonious implementation of the Action Plan.

56. A regional co-ordinating unit (RCU) of a reduced size will be established to operate under the authority of UNEP, to which the Governments of the countries participating in the Action Plan assign the overall tasks of co-ordinating its implementation.

57. The RCU will be physically located in the Wider Caribbean region.

58. The principal function of RCU will be technical, i.e., the development and co-ordination of the work of national, subregional, regional, international and intergovernmental institutions. Another important function will be to organize government expert and intergovernmental meetings to monitor the progress of the implementation of the Action Plan and decide on its further implementation.

59. The RCU will not itself conduct research but will serve as a focus for the collection, analysis and dissemination of information on results obtained through the Action Plan in solving their specific environmental problems.

60. The staff of the RCU will be nationals recruited from the States and Territories participating in the Action Plan.

(E) National focal points (NFP)

61. The active participation and co-operation of the States and Territories are the basic prerequisites for the success of the Action Plan. In order to achieve an efficient and well co-ordinated co-operation, a national focal point (NFP), to deal with all matters relating to the Action Plan, will be established (or an existing structure will be assigned this task) in each of the participating States and Territories.

62. The role of the national focal points will be:

- to co-ordinate the input of their national institutions into the Action Plan;
- to maintain links with the regional co-ordinating unit of the Action Plan.

(F) National institutions (NI)

63. National institutions (NI) designated by their Governments will provide the institutional basis for the activities agreed upon among the Governments to be components of the Action Plan. They will be the principal executants of specific activities within the Action Plan.

64. In order to allow for their full participation in agreed activities, technical and managerial assistance (equipment, training, etc.) will be provided through the Action Plan to those national institutions requiring it.

(G) Subregional and regional institutions (organizations)

65. The existing subregional and regional institutions, including NGOs, will be used to the maximum possible extent for the implementation of specific activities or for co-ordinating their implementation.

66. Whenever necessary, a national institution may also assume a subregional or regional role.

67. Technical and managerial assistance will be provided through the Action Plan to the subregional and regional institutions participating in it.

(H) Network arrangements

68. In principle, each of the activities agreed upon as part of the Action Plan will be carried out by several national institutions (NI) located in the various States and Territories of the region, which will be linked up into networks of co-operating institutions.

69. The regional (RI) and subregional institutions (SRI) participating in specific activities will also be considered members of the networks.

70. One member of each network will assume the role of the regional activity centre (RAC) for that network and co-ordinate the activity for which the network was established.

Financial arrangements

71. Taking into consideration the urgent need to carry out actions designed to improve environmental conditions and protect the natural resources of the countries of the region, the development of the Action Plan for the Wider Caribbean should be initiated as soon as possible with projects of common interest that have been accorded priority status with the financial support provided by UNEP, whatever financial resources the countries of the region are able to contribute to the Trust Fund immediately, and whatever additional contributions other countries may make in the future, and the collaboration of the agencies of the United Nations system.

72. Financial support for the activities agreed upon as part of the Caribbean Action Plan may come from several sources:

- (a) As voluntary contributions from States and Territories participating in the Action Plan;
- (b) As voluntary contributions from States supporting the Action Plan but not participating in it;
- (c) From the United Nations system;
- (d) From the regional, subregional and international organizations which are not part of the United Nations system.

73. All these contributions should be in cash or in kind (staff time, experts training, facilities, services, etc.). Although contributions in kind could be of great importance, contributions in cash are essential for the smooth implementation of the Action Plan.

74. Two mechanisms are envisaged as channels of cash contributions:

- A Caribbean Regional Trust Fund to cover common cost expenses (co-ordination, meetings, etc.) and the costs of projects (activities) of general interest to all participants in the Action Plan;
- Contributions to specific projects (activities) agreed upon as part of the Action Plan.

75. Although the ultimate aim is that the implementation phase of the Caribbean Action Plan should be financially self-supporting, the United Nations system will initially provide financial support which will progressively decrease as the Governments of the region, through a Trust Fund or other mechanism, assume fuller financial responsibility.

Regional legal agreement

76. The Action Plan should be supported by a flexible and general Regional Agreement.

- 15 -

RESOLUTION

ON THE ACTION PLAN FOR THE CARIBBEAN ENVIRONMENT PROGRAMME

THE MEETING

HAVING EXAMINED the recommendations of the Second Meeting of Government-Nominated experts to Review the draft Action Plan for the Wider Caribbean Region (Managua, Nicaragua 23 - 27 February 1981),

NOTING the cost estimates for the implementation of the Action Plan and the willingness of the Executive Director of the United Nations Environment Programme, hereinafter referred to as "UNEP", to contribute during the 1981-1983 triennium US \$1,380,000 towards these costs, subject to the availability of resources to the Environment Fund, and to the achievement of a Trust Fund target of US \$1,500,000,

I PROGRAMME IMPLEMENTATION

1. DECIDES to adopt the Action Plan for the Caribbean Environment Programme, hereinafter referred to as "the Action Plan".
2. FURTHER DECIDES that the region covered by this Action Plan on the Wider Caribbean comprises the insular and coastal States and Territories with coasts on the Caribbean Sea and the Gulf of Mexico, as well as the waters of the Atlantic Ocean adjacent to these States and Territories. In accordance with United Nations procedures, other countries and regional economic groupings exercising competence in fields covered by the Action Plan, and of which at least one member belongs to the Wider Caribbean region as defined above, may participate in the Action Plan according to the modalities of their contributions to be agreed upon beforehand.
3. DECIDES also that the programme priorities for the implementation of the Action Plan be those identified in the appendix to the Action Plan.
4. INVITES the Executive Director of the United Nations Environment Programme:
 - To prepare, with the collaboration of international, intergovernmental and regional organizations, as appropriate, detailed descriptions of the projects to be developed on the basis of the established priorities;
 - To circulate the detailed description of the projects to national focal points in all States and Territories participating in the Action Plan for their comments and designation of national institutions to participate in the individual projects as well as indication of financial and other resources that may be contributed specifically for a given project besides those from the Trust Fund and the Environment Fund of UNEP;

- To convene a meeting of the Monitoring Committee at the earliest possible date to review the detailed project descriptions in the light of comment received from national focal points and funding agencies, and to decide on the steps to be taken by UNEP in their implementation within available financial resources;
- To approach the funding agencies with the detailed project descriptions and solicit financial support for their implementation;
- To co-ordinate the implementation of the projects being supervised by the Monitoring Committee from among those previously approved by the intergovernmental meeting.

II INSTITUTIONAL ARRANGEMENTS

1. DECIDES to designate the United Nations Environment Programme, hereinafter referred to as "UNEP" as the organization responsible for the co-ordination of the implementation of the Action Plan.
2. CALLS UPON the Executive Director of UNEP, in consultation with the Governments of the Region and their intergovernmental bodies, and in close co-operation with the relevant United Nations bodies, to make adequate arrangements to achieve the objectives of the Action Plan.
3. ALSO CALLS UPON the Executive Director of UNEP to assist the Governments in the establishment of a Regional Co-ordinating Unit in order to facilitate the technical implementation of the Action Plan. This unit shall be established using the resources of the Regional Trust Fund, shall be located in Jamaica and shall be placed under the authority of UNEP.
4. REQUESTS the Executive Director of UNEP to use the most economic and cost-effective arrangements at his disposal to co-ordinate the technical implementation of the Action Plan until such time as the Regional Co-ordinating Unit is established.
5. ALSO REQUESTS the Executive Director of UNEP to convene, in early 1983, the next intergovernmental meeting of the Caribbean States participating in the Action Plan to review the progress achieved in the implementation of the Action Plan, to adopt the work plan and budget for the 1984-1985 biennium and to consider the adoption of a regional legal agreement.
6. DECIDES that the Monitoring Committee, whose main work shall be follow-up and evaluation of the Plan, shall provide UNEP with operational and policy guidelines for implementing the Action Plan and shall prepare the agenda for the 1983 intergovernmental meeting. The Monitoring Committee for 1981-1983 shall be composed of representatives of Colombia, Costa Rica, Cuba, Dominican Republic, France, Grenada, Mexico, St. Lucia and Venezuela, and shall be convened by the Executive Director of UNEP.
7. FURTHER DECIDES, that the meetings of the Monitoring Committee shall be open to representatives of all States and Territories participating in the Action Plan and to those international, intergovernmental and regional organizations involved in the subject matter of each meeting, attending as observers.

III FINANCIAL ARRANGEMENTS

1. DECIDES to establish a Caribbean Trust Fund to cover part of the common costs of the implementation of the Action Plan.
2. DECIDES ALSO that the Caribbean Trust Fund be established for the biennium 1982-1983 for the amount of US \$1,500,000 and financed by the following contributions which have been committed during the meeting by States participating in the Action Plan, and the payment of which will be subject to the budgetary procedures of their respective Governments (see table 1).
3. REQUESTS the Executive Director of UNEP to assume responsibility for administering the Caribbean Trust Fund.
4. NOTES the distribution and level of contributions from different possible sources of funding for the Action Plan during the 1981-1983 triennium which appears in the following table:

	1981	1982	1983	Total
From the Trust Fund	-	650,000	850,000	1,500,000
From the Environment Fund	800,000	300,000	280,000	1,380,000
From other sources	300,000	1,950,000	3,070,000	5,320,000
TOTAL	1,100,000	2,900,000	4,200,000	8,200,000

5. URGES the States to pay their contributions to the Caribbean Trust Fund starting January 1982.

Table 1 : Contributions to the Caribbean Trust Fund for
the biennium 1982 - 1983

Bahamas	(16,450) <u>a/</u>
Barbados	16,450
Belize	(15,000) <u>a/</u>
Colombia	30,940
Costa Rica	17,898
Cuba	30,940
Dominica <u>b/</u>	16,450
Dominican Republic	19,347
France <u>c/</u>	375,000
Grenada	16,450
Guatemala	(17,898) <u>a/</u>
Guyana	16,450
Haiti	16,450
Honduras	16,450
Jamaica	25,000
Mexico	250,000
Netherlands <u>d/</u>	
Netherland Antilles	30,000
Nicaragua	16,450
Panama	17,898
St. Lucia	15,000
St. Vincent and the Grenadines	(15,000) <u>a/</u>
Suriname	16,450
Trinidad and Tobago	19,347
United Kingdom <u>e/</u>	
United States <u>b/</u>	
Venezuela	230,000

TOTAL

1,257,318 f/

- a/ Contributions in brackets correspond to countries not present at the meeting.
- b/ These countries have not committed at the present contributions to the Caribbean Trust Fund.
- c/ The French Government will only pledge itself to the following sum (\$375,000), which initially and in accordance with the rules of the United Nations, represented 25 per cent of the Fund, and which represents 30 per cent of the present total in so far as it is assured that the additional contributions intended to restore the equilibrium prescribed by the rules of the United Nations will actually be paid (comment submitted by the delegation of France).
- d/ Although the Netherlands did not commit themselves to the Caribbean Trust Fund, the Netherland Antilles have decided to contribute the amount of \$30,000 for the 1982-1983 biennium (comment submitted by the delegation of the Netherlands).
- e/ The United Kingdom indicated they were prepared to consider making a contribution which reflected the priorities, wishes and economic position of the Dependent Territories, based upon direct consultation (comment submitted by the delegation of the United Kingdom).
- f/ It is expected that the Caribbean Trust Fund will receive additional contributions from the countries listed above to bring the total amount to the level of the approved budget for the 1982-1983 biennium, i.e. to US \$1,500,000.

PROGRAMME PRIORITIES FOR THE ACTION PLAN

(References are to the projects described in document UNEP/CEPAL/WG.48/4 and its addendum)

1. Projects related to co-ordination of the Action Plan should constitute the basis of the programme and be implemented immediately. These projects are as follows:

APCEP 1 - Survey of national capabilities and means to respond to environmental problems including scientific and administrative institutions, manpower, research facilities and equipment.

APCEP 1/1 - compilation of lists of Government-designated institutions.

APCEP 1/2 - survey of research facilities, equipment and manpower.

APCEP 1/3 - survey of environmental laws.

APCEP 2 - Development and strengthening of the capability of the nations of the Region to prepare environmental impact analyses of major development projects and plans in order to incorporate the environmental dimension in the planning and implementation of socio-economic development programmes.

APCEP 3 - Promotion of increased technical and financial support for sound environmental management practices within on-going national, regional and internationally supported economic development activities, so that they will have a demonstration effect.

APCEP 4 - Promotion of a fuller utilization of existing mechanisms for a continuous exchange of environmental data and other relevant information between the countries at the regional and subregional level.

2. In addition 21 projects are recommended to be considered as having common interest. Four of these should be implemented immediately. They are:

APCEP 9/1 add 1 - Implementation of a regional oil spill contingency plan for the States and Territories of the Wider Caribbean region.

APCEP 19 - Development of watershed management guidelines, especially for drainage areas surrounding the Caribbean Sea with particular reference to:

- control of floods, soil erosion and sedimentation;
- prevention of the destruction of tropical forests and establishment of reafforestation programmes as appropriate;
- protection of the hydroelectric potential of the rivers;

- maintenance and improvement of adequate freshwater management on the surface and underground;
- maintenance of wildlife habitats;
- prevention of the pollution of the catchment by domestic agricultural and industrial wastes.

APCEP 35 - Development and strengthening of national institutional capabilities for improving environmental health services, including water supplies in urban and rural areas, water quality control, water resources, sanitary waste disposal, water pollution control and vector control (including support to the ongoing activity through the Environmental Health Institute in St. Lucia).

APCEP 35/1 - Drinking water quality improvement.

APCEP 36 - Environmental education.

APCEP 36/1 - Development of educational packages for use by secondary school students.

APCEP 36/2 - Environmental education training for professionals.

APCEP 36/3 - The development of environmental education and awareness programmes designed to reach all levels of the population.

3. The remaining projects of common interest should be implemented as soon as funds are available. These are:

APCEP 6/1 - Surveys to determine status of endangered, threatened and vulnerable species in the Caribbean Region and development and implementation of measures for their conservation.

APCEP 9/2 - Development and implementation of an oil spill preparedness training programme.

APCEP 10 - Assessment of the sources, quantities and routes of industrial and agricultural wastes as well as domestic and municipal wastes reaching the marine environment, and their effects on human health, marine ecosystems (in particular fishery resources) and coastal amenities.

APCEP 11 - Development and strengthening of national capabilities for pollution control and monitoring through training and harmonization of methodologies.

APCEP 13 - Assessment of the impact of coastal and land-based activities on coastal marine resources comprising:

APCEP 13/1 - Identification of critical coastal areas within the Region.

APCEP 13/2 - Studies of the characteristics of industrial, agricultural and domestic waste discharged into coastal areas (waste discharge profile).

APCEP 13/3 - Studies of the effects of pollutants and coastal development activities on important biological communities and habitats, particularly those connected with coastal fisheries and other coastal dependent activities.

APCEP 13/4 - Development of a basis for environmental quality criteria applicable to the tropical coastal waters of the Region.

APCEP 13/6 - Studies of the effects of pesticides used on banana plants and other major crops, and possible biological controls.

APCEP 16 - Catalysis of assistance to national institutions for the restoration of degraded coastal ecosystems, especially mangroves and coral reefs, as part of general coastal management plans.

APCEP 17 - Studies of the life-cycle of commercially important species of crustaceans, fishes and molluscs, with particular reference to the role played by coastal ecosystems such as mangroves, coastal lagoons, coral reefs and turtle grass beds.

APCEP 18 - Assessment of the effects of disturbances on the relationship between forest cover and water and soil resource utilization, with a view to introducing environmental planning concepts in management of watersheds, particularly on small islands and coastal areas.

APCEP 22 - Strengthening of existing regional or subregional co-operation for natural disaster prevention and relief, and for environmental recovery following disasters.

APCEP 23/1 - Survey of non-conventional energy sources in the region.

APCEP 34 - Survey of existing environmental health problems with particular reference to:

- Availability and quality of drinking water supplies, particularly in rural areas;
- Waste water disposal;
- Solid waste management;
- Working environmental hazards;
- Impact on human health of industrial waste and pesticide residues, including the contamination of ground water;
- Food contamination and its possible impact on the problems of human health and malnutrition;
- The health problems associated with migration to urban areas and the relocation of people as a result of development projects;
- Vector control and vector-borne disease.

4. The Meeting recommends that, of the above projects, those under APCEP 13 should receive the first consideration.

5. The remaining projects described in UNEP/CEPAL/WG.48/4 should be considered as having specific interest. Funds for those projects should be sought on a project by project basis from Governments or other sources.

PUBLICATIONS IN THE UNEP REGIONAL SEAS REPORTS AND STUDIES SERIES

- No. 1 UNEP: Achievements and planned development of UNEP's Regional Seas Programme and comparable programmes sponsored by other bodies. (1982)
- No. 2 UNIDO/UNEP: Survey of marine pollutants from industrial sources in the West and Central African region. (1982)
- No. 3 UNESCO/UNEP: River inputs to the West and Central African marine environment. (1982)
- No. 4 IHO/UNEP: The status of oil pollution and oil pollution control in the West and Central African region. (1982)
- No. 5 IAEA/UNEP: Survey of tar, oil, chlorinated hydrocarbons and trace metal pollution in coastal waters of the Sultanate of Oman. (1982)
- No. 6 UN/UNESCO/UNEP: Marine and coastal area development in the East African region. (1982)
- No. 7 UNIDO/UNEP: Industrial sources of marine and coastal pollution in the East African region. (1982)
- No. 8 FAO/UNEP: Marine pollution in the East African region. (1982)
- No. 9 WHO/UNEP: Public health problems in the coastal zone of the East African region. (1982)
- No. 10 IMO/UNEP: Oil pollution control in the East African region. (1982)
- No. 11 IUCN/UNEP: Conservation of coastal and marine ecosystems and living resources of the East African region. (1982)
- No. 12 UNEP: Environmental problems of the East African region. (1982)
- No. 13 UNEP: Pollution and the marine environment in the Indian Ocean. (1982)
- No. 14 UNEP/CEPAL: Development and environment in the Wider Caribbean region: A Synthesis. (1982)
- No. 15 UNEP: Guidelines and principles for the preparation and implementation of comprehensive action plans for the protection and development of marine and coastal areas of regional seas. (1982)
- No. 16 GESAMP: The health of the oceans. (1982)
- No. 17 UNEP: Regional Seas Programme: Legislative authority. (in preparation)
- No. 18 UNEP: Regional Seas Programme: Workplan. (1982)
- No. 19 Rev. 1. UNEP: Regional Seas Programme: Compendium of projects. (1984)
- No. 20 CPPS/UNEP: Action Plan for the protection of the marine environment and coastal areas of the South-East Pacific. (1983)

- No. 21 CPPS/UNEP: Sources, levels and effects of marine pollution in the South-East Pacific. (1983) (In Spanish only)
- No. 22 Rev. 1. UNEP: Regional Seas Programme in Latin America and the Caribbean. (1984)
- No. 23 FAO/UNESCO/IOC/WHO/IAEA/UNEP: Co-ordinated Mediterranean Pollution Monitoring and Research Programme (MED POL) - Phase I: Programme Description. (1983)
- No. 24 UNEP: Action Plan for the protection and development of the marine and coastal areas of the East Asian region. (1983)
- No. 25 UNEP: Marine pollution. (1983)
- No. 26 UNEP: Action Plan for the Caribbean environment programme. (1983)
- No. 27 UNEP: Action Plan for the protection and development of the marine environment and coastal areas of the West and Central African region. (1983)
- No. 28 UNEP: Long-term programme for pollution monitoring and research in the Mediterranean (MED POL) - Phase II. (1983)
- No. 29 SPC/SPEC/ESCAP: Action Plan for managing the natural resources and environment of the South Pacific region. (1983)
- No. 30 UNDIESA/UNEP: Ocean energy potential of the West and Central African region. (1983)
- No. 31 A. L. DAHL and I. L. BAUMGART: The state of the environment in the South Pacific. (1983)
- No. 32 UNEP/ECE/UNIDO/FAO/UNESCO/WHO/IAEA: Pollutants from land-based sources in the Mediterranean. (1984)
- No. 33 UNDIESA/UNEP: Onshore impact of offshore oil and natural gas development in the West and Central African region. (1984)
- No. 34 UNEP: Action Plan for the protection of the Mediterranean. (1984)
- No. 35 UNEP: Action Plan for the protection of the marine environment and the coastal areas of Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. (1983)
- No. 36 UNEP/CEPAL: The state of marine pollution in the Wider Caribbean region. (1984)
- No. 37 UNDIESA/UNEP: Environmental management problems in resource utilization and survey of resources in the West and Central African region. (1984)
- No. 38 FAO/UNEP: Legal aspects of protecting and managing the marine and coastal environment of the East African region. (1983)
- No. 39 IUCN/UNEP: Marine and coastal conservation in the East African region. (1984)
- No. 40 SPC/SPEC/ESCAP/UNEP: Radioactivity in the South Pacific. (1984)

- No. 41 UNEP: Socio-economic activities that may have an impact on the marine and coastal environment of the East African region. (1984)
- No. 42 GESAMP: Principles for developing coastal water quality criteria. (1984)
- No. 43 CPPS/UNEP: Contingency plan to combat oil pollution in the South-East Pacific in cases of emergency. (1984)
- No. 44 IMO/ROPME/UNEP: Combating oil pollution in the Kuwait Action Plan region. (1984)
- No. 45 GESAMP: Thermal discharges in the marine environment. (1984)
- No. 46 UNEP: The West and Central African marine environment. (1984)
- No. 47 UNEP: Prospects for global ocean pollution monitoring. (1984)
- No. 48 SPC/SPEC/ESCAP/UNEP: Hazardous Waste Storage and Disposal in the South Pacific. (1984)